A

CLINICAL LECTURE

DELIVERED TO THE

STUDENTS OF SURGERY IN THE ROYAL INFIRMARY OF EDINBURGH,

AT THE

CONCLUSION OF THE SUMMER COURSE FOR 1828.

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REVIEW of some of the Surgical Cases which have lately occurred in the ROYAL INFIRMARY *of* EDINBURGH—*A Clinical Lecture delivered to the Students of Surgery in that Institution, on Monday, 28th July* 1828, *by* GEORGE BALLINGALL, *M. D., F. R. S. E. Fellow of the Royal College of Surgeons, Surgeon Extraordinary to the King, Regius Professor of Military Surgery in the University of Edinburgh, and one of the Surgeons to the Royal Infirmary.*

GENTLEMEN,

BEFORE proceeding to a review of the cases which have occupied your attention during the present course, I am desirous of noticing three important ones which were under treatment at the conclusion of the Winter Course of Clinical Surgery, and of which the details were necessarily left incomplete in the summary which was then printed.

The first of the cases alluded to is that of *James Craig*, who had a cancerous warty excrescence removed from the outside of his left thigh on the 15th of October last. This patient left the hospital after a tedious confinement, with an ulcerated surface in the situation from which the excrescence had been removed, and with the existence of glandular swellings in his groin, which were deemed to be of a malignant nature.

The swellings subsequently ulcerated, discharged in the first instance a quantity of atheromatous matter, and afterwards gave origin to a soft fungous excrescence which has since progressively increased.

In consequence of an attack of erysipelatous inflammation in the thigh, and the subsequent formation of matter under the integuments, this man was re-admitted into hospital on the 19th of May, and was for some time under your observation, an extensive sinus running down the inside of his thigh along the inner edge of the sartorius muscle was laid open to the extent of six inches, and caustic potass was applied freely to the ex-

crescence in his groin, but without any very obvious benefit. His case was now submitted to a consultation, but it being the unanimous opinion of the Surgeons that he was not a subject for farther operation, he was again recommended to leave the house, and was dismissed on the 20th of June.

Within these few days I have seen this poor man in a lodging in the High Street, where he subsists on the bounty of one of those numerous charitable institutions which do honour to our city, and which has been procured for him through the benevolent exertions of one of the pupils of this house.

Craig has not fallen off much in his general appearance since he left the Hospital, but he is occasionally harassed with diarrhœa, and with hectic sweats. The affected thigh is much wasted; the excrescence in the groin has assumed a mushroom-like appearance, is of a circular form, from three to four inches in diameter, and its edges overlapping the base. The sinus which was laid open in the thigh is much diminished in extent, but not yet healed. The sore left by the extirpation of the excrescence from his thigh in October last presents rather a healthy appearance, but is far from being cicatrized. In short, the whole aspect of the case gives no room to prognosticate any thing but a miserable life and a lingering death.

Of the case of *Robert Amos* who had a large fungoid mass removed from his right orbit in the beginning of February last, I am enabled to give a more favourable report. In reply to a letter which was written to him within these few days by one of my pupils, Amos states, that although he has lately been harassed with dyspeptic symptoms, he remains quite free from any pain in the orbit, or other symptom of returning disease in that situation, the sore being, as far as I can understand from his letter, nearly, if not wholly cicatrized.

The last of the cases alluded to is that of *James Thomson*, who had some carcinomatous glands removed from his groin in September last, and in whom the external iliac artery was subsequently tied. The last notice of this man's case was in the following words:—"The sore, although now greatly enlarged in extent, was found to have a healthy aspect, insomuch, that some of my friends were disposed to think that a cure might ultimately be effected. I had, however, seen too much of the malignant disposition of this ulcer to be for a moment deceived, and was not at all surprised, in a few days, to find the ulcerative process again going on in its centre, the granulations assuming an ash-coloured œdematous appearance, and the cavity enlarging at every subsequent dressing, while, at the

same time, the granulations round the margin of the sore retain, as you see, a florid and healthy appearance."

This patient continued under observation in the Hospital, without any remarkable change, until the beginning of April, when, tired of his situation, he solicited his discharge, and was subsequently admitted into the Workhouse, under the care of my colleague Dr. Hunter. Here he continued to linger, his strength gradually subsiding, and the ulceration extending, until the 18th of June, when he expired, without any recurrence of hæmorrhage or other urgent symptom; having survived the first operation about nine months, and the ligature of the external iliac about six. The ulceration in his groin had latterly assumed a sloughy character—had laid bare the spermatic chord for nearly two inches—and had extended considerably downwards upon the thigh. Its treatment, for some time previous to his death, consisted chiefly in frequent applications of a solution of the chloride of soda with simple dressing.

From circumstances, which I took occasion to mention to you, the injection and dissection of this patient were not prosecuted with that minute accuracy which would have been desirable; and we found it impossible to get away the pelvis and thigh, which would have so much enhanced the value of the preparation from this man's groin. This preparation, consisting of the blood vessels and a portion of the soft parts, including the bed of the ulcer, I had the pleasure of exhibiting to you, and have annexed a sketch of it to the present lecture, which will, I trust, enable you to understand the changes in the circulation which had taken place subsequent to the ligature of the external iliac. The cavity of this last mentioned vessel was obliterated, and its coats converted into a ligamentous chord from the point at which it had been tied, immediately above the origin of the episgastric, up to its junction with the internal iliac. The epigastric, as may be seen in the sketch, is obliterated and ligamentous for about an inch in extent, and the circumflex iliac is in the same state for about an inch from its origin. The remaining portions of both these vessels have been filled by a retrogade flow of the injection from the branches towards the trunks, and this supply they have, I presume, received chiefly from their inosculations with the lumbar and ileolumbar arteries. On tracing the vessels into the cavity of the ulcer, we find that a portion of the femoral artery amounting to three inches in extent, and, including the origin of the profunda, is completely destroyed, and the ulcerated extremities of it closed by coagula, the inferior of which is distinctly seen in the drawing. The formation of these coagula has evidently been a process long subsequent to the ligature of the external iliac;

and although we have instances of this salutary process occurring every day in ulcerating arteries of inferior size, it very seldom takes place in arteries of this magnitude, so as to obviate hæmorrhage. In this instance the formation of the coagula was probably aided by the diminished force of the circulation in this part of the vessel, from the obliteration of the trunk above. Before quitting this case, I would just remark that, although from the beginning it was one of a very unpromising character, yet, I trust, it has also been, from first to last, one of a very instructive nature to those gentlemen who have had an opportunity of witnessing it. The most remarkable circumstances in its progress, are—the very obvious improvement which it underwent subsequent to the ligature of the vessel within the pelvis—the destruction of the femoral artery, and the closure of its apertures, as well as of the origin of the profunda, without any hæmorrhage—and lastly, the preservation of the circulation in the limb through the branches of the internal iliac, notwithstanding the obliteration or destruction of the main artery of the inferior extremity, to the extent, in all, of more than six inches.

After this digression which I have been induced to make, chiefly with a view to the information of those gentlemen who occupied your places during the last winter session, I would now solicit your attention to some of those accidents which have more recently fallen under our observation.

On the 8th of May, *William Gardener*, aged 19, was admitted with a severe lacerated wound of the hand which he had received that morning in consequence of the bursting of a fowling piece. "The metacarpal bones of the left hand were fractured near their carpal extremities, their heads, with the exception of that of the thumb, were dislocated at their articulation with the bones of the carpus, the anterior row of which was very much exposed and loosened from its connections with the other; the soft parts on the back, but particularly on the palm of the hand were extensively lacerated—hæmorrhage trifling."

This was *prima facie* a case for amputation, and I immediately proceeded to remove the injured parts by a double flap operation, a little above the middle of the forearm. This lad was threatened, two days after the operation, with some excess of inflammation in the stump which was speedily subdued by the abstraction of twelve ounces of blood from the arm, the administration of a purgative, and the removal of the adhesive straps from the surface of the wound. His stump afterwards healed kindly, and on the 27th of May, he was dismissed cured.

This is one of the cases to which I consider the flap operation particularly applicable, and I may here state an inconvenience which I

once witnessed from the performance of the operation by the double circular incision in this part of the arm. In the case alluded to where the arm was brawny, and the bellies of the muscles very full immediately below the elbow, the skin, when divided by the first turn of the knife, could not be easily drawn upwards over the subjacent muscles, it formed a stricture upon them as the prepuce does upon the glans in a case of phymosis, and was with difficulty retracted sufficiently to form a covering for the surface of the stump. Although Gardener's recovery was rapid, and his stump in every respect a good one, yet the consideration of this case gave rise to a remark for which I am entirely indebted to Dr. Lubbock, and which I consider well entitled to your attention; in a case like the present, where the tendons have been torn through, or disengaged at their distal extremities, and where the amputation is performed by transfixing the limb with a catline and cutting outwards, the tendons, from the resistance which they give to the edge of the knife, are in some measure drawn upwards, and are thus cut longer and less smoothly than is desireable; this remark will obviously apply more forcibly as we come farther down in the forearm, the tendons being here cut with more difficulty, and less intimately connected by cellular adhesions.

Although decidedly favourable to the double flap operation in a large proportion of cases, yet I am not an advocate for its indiscriminate use, and I am desirous that none of its occasional inconveniences should escape notice, in order that we may be prepared to avoid them; in the case specified above, the simple expedient of making an assistant grasp the wrist firmly will, I think, enable us to do so.

In the case of *Alexander Moffat* aged 17, who was admitted on the 20th of May, you had an instance of a severe lacerated wound of the thigh running rapidly into gangrene, and terminating in the death of the patient. This lad's wound is described as follows.

"There is a contused wound extending from the centre of the popliteal space outwards across the knee to the fibular edge of the left patella, from near the middle of this wound there is another which runs obliquely upwards towards the inner part of the thigh for the distance of three inches; the integuments and fascia are separated from each other all around the knee, and in many parts the latter membrane is lacerated. Two wounds of a similar character but of trifling extent are situated, the one in front of and a little below the inner malleolus, the other behind the tendo Achillis of the right foot. Injury was the consequence of the broad wheel of a cart pressing against his thigh for some minutes, the cart being loaded with five cwt. of marble."

On the morning of the 21st, the wound was observed to be gangrenous, and before the usual hour of visit this gangrene had spread extensively round the knee and down the fore part of the leg; free incisions were made through the black and insensible skin, which gave vent to large quantities of fœtid air and dark coloured sanies. The propriety of amputating the limb was now considered in a full consultation, and was declined, in consequence of the advanced state of the disease, the lower part of the thigh being decidedly gangrenous, and the remainder of it so far involved as to be discoloured, swollen, tender, and emphysematous; the wounds on the other leg had also assumed a gangrenous disposition, the patient was affected with subsultus tendinum, his pulse at 120 and fluttering, his tongue furred and dry, his skin hot, and thirst urgent. Hot turpentine was poured into the incisions, and the effervescing poultice applied. Opium and wine were administered internally, but without any thing like even a temporary suspension of the symptoms. He soon became delirious, and expired on the evening of the 23d.

The question which fell to be discussed in the consideration of this boy's case,—the propriety of amputating during a spreading gangrene,—is one which has of late occupied much of the attention of practical surgeons, and one regarding which their sentiments have recently undergone an important change. The precept of not amputating during the progress of gangrene was much too absolute to be good; and we are chiefly indebted to the military and naval surgeons of the present day for having shown that this dogma does not admit of that indiscriminate application which was at one time given to it. In the writings of Larrey, Lawrence, Hennen, Guthrie, Hutchison, and Curtis, you will find ample encouragement and authority to deviate from what was long held to be one of the best established rules of our art. The first of these distinguished surgeons has, by his practice and by his writings, contributed more than any other individual to establish a well-founded and practical distinction in the treatment of gangrene arising from a local and that from a general cause; and the last mentioned gentleman, a naval surgeon, is particularly entitled to notice amongst those who claim the merit of priority in recommending the practice of amputating in cases of traumatic gangrene, without waiting for a line of separation; for although his work was not published until 1807, it refers chiefly to practice instituted in the naval hospital at Madras, so far back as 1782.

Amongst other sources of information on this important point you will find a very recent instance of the successful issue of a case in which amputation was performed during a spreading gangrene, recorded in the

Edinburgh Medical and Surgical Journal, by Mr. M'Dermott of the 4th (or King's Own) Regiment, now in the Castle here.

Although, for the reasons formerly stated, I declined this operation in Moffat's case, and although the only case in which I have ever operated in such circumstances, terminated fatally, yet I should be sorry to have it thought that I am in any degree hostile to the practice. I think it right to observe, that, in declining an operation in the case now under review, I was in no degree influenced by the unfavourable issue of another case, which I shall immediately proceed to detail: You will recollect that at the time the amputation of Moffat's limb was under consideration, the case I allude to afforded a prospect of a favourable result. In declining the removal of this boy's limb, I was actuated by a conscientious conviction, (right or wrong,) of its inutility; by a firm persuasion that the performance of an operation in a case so hopeless, would have been more likely to bring a promising practice into disrepute, than to have saved the life of my patient.

In the case of ***Robert Brockie***, a patient of Mr. Liston's, you had an opportunity of seeing the limb amputated during a spreading gangrene, and although in this instance without success, yet I do not think that upon a fair and full consideration of the case, it can be held to argue much against a repetition of the practice. It affords another instance of those internal depositions of purulent matter succeeding to injuries or operations which have been noticed by Mr. Rose in the last volume of the Medico-Chirurgical Transactions of London, and of which I have seen several examples. As this was a case which bears upon a great practical question, and one which very naturally and properly excited much of your attention, I am induced to give it in detail from the journals of the house.

Robert Brockie, aged about 40, admitted 3d May 1828; was brought in about 10 P. M., having fallen from a house four stories high in Dalkeith. There is a fracture of the tibia and fibula about an inch and a half above the ankle-joint, the lower portion of bone appears to be driven under the other. There is likewise a fracture of the second phalanx of his thumb. The limb was placed on the suspending apparatus.

8th. The bandages round ankle-joint were yesterday removed in consequence of pain and swelling of limb. Had some wandering, accompanied with pain of head and full pulse; was bled to ℥xx, blood cupped and buffed. Passed a quiet night—skin surrounding the fracture of a dusky red colour and some vesications on fore part—pulse 84, full—tongue loaded—no stool—free from pain of head.

R. Tart. Potass. et Sodæ ℥ss.
Supertart. Potass. ℥ss.
Tart. Antimon. gr. ii.
Aquæ. ℥xvi. M.
Capiat ℥i. tertia q. que hora.

9*th*. Several large black vesications over the inner malleolus. The whole of the inside of the leg is of a dusky red colour, it is extending in a streak upwards along the inner side of the thigh, toes very cold, but is sensible when they are touched; had a good deal of starting in limb; slept badly; three natural stools; tongue moist; some thirst; skin rather hot; pulse 88, full.

A bandage applied from the toes up the thigh.

Lotio evaporat. crur.

10*th*. Passed a restless night, undoing the bandages from his leg; dusky appearance has extended more towards inside of leg, and somewhat higher up the thigh; some vesications appearing on fore part of leg; no pain of head, but had some delirium last night; tongue moist; four loose stools; pulse 72, full; skin cool, takes his food; foot continues cold, but feeling remains in it.

Infus. Catechu Thebai. ℥ss. subinde.
Habt. haust. h. s. c. Tinct. opii. gutt. c.

11*th*. Has been sleeping soundly since one this morning, complains of no pain. Tongue much loaded; one stool; is perspiring freely; pulse 112; dusky appearance of leg much the same. It does not appear to have spread much on the thigh; the fore part of foot and toes are cold and very livid; has taken no food this morning.

R. Camphor. ʒss.
Emulsion. Amygdal. ℥vi. M.
Habeat ℥i. secund. q. que hora. Beef-tea ad lib.

12*th*. Lies in a drowsy state, but frequently starts up in his bed. The dusky appearance on inside of thigh has entirely disappeared, the fore part of foot is more livid and cold; he does not appear to have any feeling in his toes, the discharge from ancle has a most offensive smell; no stool since yesterday; tongue loaded, much thirst; his breathing appears rather laborious; delirious at times; no pain of head; pulse 100, of good strength; skin hot. Mr. Liston removed the limb above the knee by the flap operation, there was some hæmorrhage after removal to bed in consequence of which the stump was undone and several vessels secured. The bones were found much comminuted, the fracture extending into the ancle-joint. The cartilages were of a red appearance. There was

matter of a very putrid nature running a considerable way up the calf of the leg.

13*th.* Slept well, some starting of stump, has had troublesome cough this morning, breathing quite natural; pulse 88, of good strength; tongue loaded; no stool.

Beef-tea. Contin. Mist. Camphor.

14*th.* Slept well, no pain in stump, complains of pain in breast, accompanied with troublesome cough; no pain of breast on full inspiration; one scanty stool from an injection; tongue moist but white, perspires much; pulse 82, skin rather cold. Omit. Mist. Camphor.

R. Tinct. Digital. ℥ss.
Tinct. Gentian. ℥iss. M.
Capiat. coc. parv. quarta q. que hora.

15*th.* Slept well; had some vomiting of bilious matter this morning, bowels not open; had a turpentine enema, which procured one copious stool; frequent cough; perspires much, skin cold and clammy; his whole body has a peculiar disagreeable odour; pulse 55; tongue moist.

Omit. Tinct. Digital.
Habeat Spirit. Commun. ℥i. secunda q. que hora.

16*th.* Slept well, but was restless during fore part of night, had some diarrhœa, on which an anodyne enema was ordered, since which he has had no stool, takes little food; some cough; pulse 50, skin cold and clammy, tongue clean, hiccup at times but no vomiting, much discharge of fetid matter from stump.

17*th.* Passed rather a restless night, has much less cough, considerable discharge from stump, which looks more healthy; pulse 80; tongue moist and clean, less thirst, had some delirium during the night.

Habt. Tr. Opii. Camphor. ʒii. quarta q. que hora.

18*th.* Passed rather a restless night, has at times a good deal of hiccup but no vomiting, tongue a little loaded but moist, one natural stool last night, delirious during fore part of night, still a little cough, much discharge from stump of healthy looking matter; pulse 72; took some breakfast.

19*th.* Had a sinapism applied to the epigastrium last night, was very restless, hiccup continues frequent, two natural stools, has little cough, but breathing is laborious, is perspiring much; pulse 74 full; some subsultus; much discharge from stump.

R. Spirit. Ammon. Arom. ʒii. tertia q. que hora.
Rum ℥xii.

20*th.* Lies in a drowsy state, no delirium, two natural stools since

yesterday, much sweating during night, stump continues discharging; pulse 90; no hiccup, took some breakfast.

R. Emulsion. Amygdal. ʒvi.

Camphor. gr. xxx. capt. ʒi. tertia q. que hora.

21*st*. Passed a quiet night, hiccup returned this morning, eat two eggs for breakfast, no stool, much sweating during night; pulse 100; much discharge from stump, countenance much improved.

22*d*. Continues the same.

Two eggs for breakfast, beef ʒvi. daily.

23*d*. Complains of pain in breast increased on full inspiration, frequent cough with much tenacious expectoration, slept well, one natural stool, tongue loaded; pulse 96; less discharge from stump. In the space of two hours a sudden change took place, his breathing became laborious and at the visit he appeared rapidly sinking; he however rallied in the afternoon, but his breathing became again affected, and he sunk again the next morning.

25*th*. On examination of body, the 4th rib was fractured about an inch from the cartilage, a small quantity of pus was found exterior to the pleura costalis, old adhesions on both sides to a great extent. The left lung was full of white tubercular bodies; several abscesses in the liver; 4 oz. of bloody serum in pericardium. A long coagulum was found in the femoral artery.

Here, Gentlemen, was a case in many circumstances the reverse of the former; the patient was more advanced in life, and evidently of a much less irritable habit; the gangrene supervened later, and was of a much less acute form; here it was situated in the extreme part of the limb, and the thigh free from swelling, tenderness, or emphysema; this, in short, was deemed by every one a fit case for experiment in a question which is perhaps still to be considered in some measure *sub judice*. One symptom, however, appeared early in this patient's case, which I did not fail to remark to my colleagues, and which, as far as my observation goes, is a circumstance almost uniformly foreboding a fatal termination; I allude to a peculiar yellow hue of the skin, which not unfrequently attends the symptomatic fever supervening upon wounds and operations; this has perhaps struck me more forcibly from being familiar with a similar appearance in the idiopathic fevers of tropical climates; and although I have no wish to alarm the citizens of Edinburgh by talking of a yellow fever in this part of the world, yet I am bound to state for your instruction, that I have occasionally seen it here as well marked as I ever saw it at Seringapatam or Batavia, and when supervening upon injuries, much more uniformly fatal.

A case of this kind occurred some years ago, which made a deep impression on my mind, and which must have done so, I think, upon all those who had occasion to witness it; I allude to that of a seaman belonging to one of his Majesty's ships, in the roads, whose limb had been amputated below the knee in consequence of an accident. The accommodation on board his ship being defective, and the vessel about to sail, he was brought ashore to this Hospital and placed under my care; here his stump sloughed, the symptomatic fever ran high, was attended with that dingy yellowness of the skin to which I allude, and in a few days he died. I observed to the surgeon of the ship who came ashore to see him dissected, that this case wanted nothing but the "black vomit" to constitute a complete example of yellow fever; and it was found, on laying open the stomach, that this circumstance, necessary to complete the parallel, was hardly wanting; for here was a large collection of that dark grumous fluid resembling coffee grounds, which is so often evacuated from the stomach in tropical fevers.

Amongst the numerous cases of fracture which always constitute a large share of our materials for clinical observation, you have had an opportunity, during the present course, of seeing two remarkable cases; in one of which the process of reunion has been excessively slow, and in the other altogether suspended.

The first of these patients, *Donald Clark*, aged 72, was admitted on the 26th March under my care, having sustained a fracture of the leg, described in the Journal, as follows:

"The tibia is fractured about one inch and a half below its tubercle, and again, two inches lower down, the intermediate portion of bone is loose and moveable; the fibula is broken nearly opposite to the lower fracture of the tibia. Injury was the consequence of his leg having been pressed between a coal cart and a wall.

"Limb was placed on M'Intyre's splint with a pasteboard-splint on either side, firmly confined with a roller."

"*May* 10. Upper fracture has united, but lower one crepitates distinctly when the limb is moved. To have beef, porter, &c."

"*June* 1. No crepitus, but still great mobility at the seat of the lower fracture."

"*June* 26. To sit up every day and walk upon crutches."

"*July* 12. Mobility has decreased considerably. Dismissed relieved."

This man has been visited by the House surgeon to-day, who reports that the union of the tibia, although still incomplete, has, of late, been advancing by slow degrees. The fractured extremities of the bone

are, and have all along been, in perfect apposition; the intermediate portion between the two fractures has preserved its vitality, and I can see no circumstance which should have prevented the more speedy reunion of the lower fracture, except the defects of a constitution which has all the appearance of having been impaired by hard labour, and the accession of a premature rather than an extreme old age. The limb was firmly secured in pasteboard splints, and the patient dismissed with an injunction to move as much as possible with the aid of crutches, for the purpose of exciting action in the fractured part of the limb. This is a case, in my opinion, ill calculated for the adoption of any of those expedients which surgery holds out for the treatment of cases of this kind. When union has been retarded, as in this instance, from a general defect in the habit, we have no reason to expect that such expedients would succeed; the man's constitution cannot be improved by four months confinement in the Hospital.

The other case of ununited fracture is that of *Thomas Christie*, aged 41, a patient of Mr. Liston's, who was admitted on the 9th of June, and stated, "That six weeks ago, when at work down a pit, a piece of wood fell and struck him upon the arm, which was fractured. A good deal of swelling and inflammation of the arm succeeded, for which he was once bled from the arm, and at different times had leeches applied to the number of eighty. Three weeks after the accident, splints were applied, which he says were repeatedly obliged to be removed on account of the swelling and inflammation.

There is a transverse fracture of the humerus four inches above the elbow. The ends of the bone overlap each other, the lower portion going in front; not the slightest union has taken place, and the ends of the bone cannot be brought into apposition when extension is used, general health good. The arm since the accident has been kept in a bent position."

On the 12th, "The forearm was tightly bandaged with a flannel roller, a pasteboard splint was applied on the outer and inner side of the arm, and a wooden splint applied firmly on the outside over all." The patient was ordered a beef steak and a bottle of porter daily; and the splints were continued on the arm until the 30th, when the following report is entered.

"No union has taken place, the bones are as loose, seem to have the same motion, and to remain at as great a distance from each other. Mr. Liston removed a portion of the broken extremity of each bone by cutting them somewhat obliquely. A splint was applied on the inner side of the arm, and which supported the whole of the forearm; a short splint

was applied on the outside. Complains of pain at elbow—passed a quiet night—not much sleep—bowels not open—tongue rather loaded—pulse 96—skin cold—not much pain in the wound."

A considerable degree of swelling and tension followed the operation, which rendered it necessary to remove the outer splint—a great part of the wound at either extremity healed by the first intention, the centre of it being kept open for some time by the discharge of a collection of matter which formed over the region of the biceps muscle. The whole wound is now nearly cicatrized, and the case wore a very promising appearance until within these few days, when the patient met with a most untoward accident by falling out of bed during sleep; by which the process of reunion has no doubt been disturbed, but it is to be hoped will not ultimately be prevented.

In speaking of this case, I noticed a number of others in which this operation had been practised with various degrees of success; I fear, however, that I omitted to mention, or to give you a reference to two interesting cases treated some years ago in this house, one by the late Dr. Wardrop, and the other by my colleague Dr. Inglis. Of these two cases you will find the particulars detailed in the 1st volume of the Edinburgh Medical and Surgical Journal; and what renders them the more remarkable is, that in both instances union was procured, although the fracture existed in the one case in the forearm, and in the other in the leg; situations in which Boyer and other eminent surgeons had altogether discountenanced the performance of this operation.

Amongst the cases of dislocation which have occurred during the present course, we have had an instance of a complete luxation of the elbow joint, which is of importance, as showing the necessity of an accurate attention to diagnosis in cases of this kind.

Dorcas Spiers, aged 6, was admitted on the 4th of June under my care, and was reported to have fractured the left humerus by a fall on the preceding day.

"On either side of the upper arm there is a pasteboard splint, tightly confined by a roller, the lower part of the limb very tense, and somewhat discoloured, the forearm has not, according to the usual method of treatment, been placed at a right angle with the upper arm, but forms an obtuse angle with it, and cannot be either bent or extended farther; upon the removal of the splints, the head of the radius was found lying behind the outer condyle of the humerus; the entire upper surface of the olecranon was felt through the soft parts, and there was a distinct depression above this process of the ulna; the humerus was indistinctly felt

lying on the anterior surfaces of the bones of the forearm; crepitus was quite evident, but appeared to arise entirely from the friction of the displaced bones upon each other, and no crepitus could be detected when the two extremities of the humerus alone were moved in opposite directions. The dislocation was reduced by bending and extending the forearm over the knee. The forearm was afterwards bent to a right angle with the upper arm, and supported by a sling, a cold lotion being applied to the inflamed parts."

On the 12th the patient began to enjoy a little passive motion of the joint, and on the 16th was dismissed cured.

The nature of this case, Gentlemen, you see from the practice employed, had evidently been mistaken; and, although, in all the cases of simple dislocation of the elbow backwards, which I have happened to see, the nature of the accident has been readily detected; yet I know few situations in which we meet with injuries of a more puzzling and obscure nature than in the elbow joint, and none where greater indulgence is due to the practitioner who may have misconceived the precise nature of such an accident. Although the error in this case appears to have been a gross one, I would not willingly be thought the last to find an excuse for it; it has been well observed, that "it becomes us upon all occasions to weigh errors in the balance of good will, and rather to point them out for amendment than for censure."

Although not strictly within the limits of the present course, I would here notice a case of partial luxation of the elbow-joint, which was recently in the house, and which most of you, I presume, had an opportunity of witnessing; it affords a ready and apt illustration of the difficulty of pronouncing with certainty upon the nature of such injuries until the swelling accompanying them has in some measure subsided.

On the 30th of March, *William Henderson*, aged 12, was admitted with a severe injury of the elbow-joint; upon examining which the following report was entered in the journal:

"The soft parts about the elbow-joint are very much swelled; the skin is red, hot, in some parts vesicated, and in others abraded; the configuration of the fore-arm is greatly altered; the hand is in a state of complete pronation and cannot be supinated; the fore-arm forms an obtuse angle with the upper arm, flexion and extension are very confined, the external condyle of the humerus is very indistinct, the head of the radius is lying behind it, and the tip of the finger may be placed in its articular cavity. Injury was the consequence of a fall upon the palm of his hand four days

ago. He states that his fore-arm doubled under him, and that the weight of his body fell upon the inside of the elbow."

Here the displacement of the head of the radius was obvious, but it was doubtful whether or not the joint had sustained any farther injury. Leeches were ordered to be applied, and on the morning of the 1st of April Dr. Lubbock, having fully satisfied himself of the nature of the accident, immediately proceeded to reduce the luxation, and entered the following report in the journal:

"Thirty-six leeches have been applied with the effect of reducing the swelling and inflammation; to-day, by extending the fore-arm, bending it upon the upper arm, and pronating the radius, the bone was easily replaced, and the fore-arm can now be readily bent to a right angle with the humerus."

The boy's arm was supported for some time in a sling, passive motion of the joint was then practised, and in a short time he was dismissed cured.

To illustrate this subject still farther, I am enabled, through the attention and kindness of Dr. Lubbock, to lay before you the following notes of the appearances in a case of dislocation of the elbow-joint, in which a partial or imperfect reduction had subsequently taken place; the head of the radius still remaining, however, behind the condyle of the humerus.

"All the ligaments were unusually strong. The internal, external, and coronary ligaments possessed their natural figure, but were slightly altered in their direction. The outer condyloid head of the humerus was rough and irregular where it is naturally articulated with the head of the radius, but at its lower and back part it presented a large excavation, lined with cartilage, for the reception of the upper end of that bone, which was much enlarged, rounded, and covered with cartilage. The surface of the humerus, naturally articulating with the ulna, was rough and inarticular at its fore-part, and was excavated behind where it had been pressed upon by the coronoid process. The olecranoid cavity was elongated in the direction of the axis of the bone. The olecranon was shortened, and appeared to have fallen into its natural position, partly by an absorption of its own substance, and partly by the absorption of the coronoid process."

There is one circumstance connected with this luxation which has not, I think, been sufficiently adverted to, and which I should be glad to have an opportunity of investigating:—I allude to the state of the lateral connexion between the radius and ulna at their distal extremities. I find it difficult to conceive (supposing the ulna to retain its place) how the radius gets so far displaced as to rise behind the condyle of the humerus, unless there be a breach of the sacciform ligament connecting it with the

ulna at their carpal extremities, for so long as this ligament remains entire, they are, as Mr. Key has observed, " virtually one bone."

I have entered the more fully into the nature of this accident, because it appears to have fallen so rarely under the observation of one the most capable of illustrating it, and to whom we are indebted for much practical information on other luxations. Sir A. Cooper, in the recent edition of his lectures published by Mr. Tyrrell, states that he has only seen this dislocation once, and that in a dead body brought to St. Thomas's Hospital for dissection, and whose history was unknown.

The French surgeons, however, do not speak of this dislocation as an occurrence so rare; and I may remark that the case of Henderson, above detailed, is the second well marked instance of this accident which has fallen under my own observation within the last six months. The other case to which I allude, was that of a girl from Ayrshire, who was sent in here for the purpose of consulting a celebrated bone-setter, and who was subsequently shown to me; in that case the dislocation had existed, as far as I recollect, for a period of thirteen weeks, the motions of the joint were not greatly impaired, and were progressively improving; under these circumstances, I dissuaded the mother of the girl from subjecting her to any farther violence in repeating the attempt to replace the bone.

After noticing these accidents, I would now, Gentlemen, solicit your attention to some of the more chronic affections of the joints.

In the case of *Thomas Sprunt*, aged 39, who was admitted on the 5th of May, you had an example of caries and ulceration of the ancle joint, of which the history is detailed in the following report.

" A little in front of the right malleolus externus, there is the orifice of a sinus which runs underneath the extensor tendons, and terminates by another opening a little below the inner malleolus; from both of these orifices the probe may be passed into the articulation of the astragalus and tibia, the articulating surfaces of which bones are felt rough; discharge copious, but healthy; the motions of the joint are very confined, and the surrounding parts much swelled and slightly inflamed. General health pretty good; pulse 100; tongue a little furred; slight sweating; bowels rather costive.

Twenty-six years ago was affected apparently with necrosis of the tibia, which bone is evidently much enlarged. Nine years ago was first attacked with his present complaints, from which he recovered completely in five months, and continued perfectly well until within six months of the present date, when he again relapsed, after exposure to cold and wet."

This was a case in which, considering all its circumstances, no reason-

able prospect of relief could be held out from any milder means, and the man having come prepared for the removal of his leg, it was amputated by the single flap operation, two or three days after his admission.

You saw that in this case I had some difficulty in securing the blood-vessels; the tibial arteries were cut across, just at the point where they spring from the popliteal, and were found firmly imbedded in the condensed cellular membrane, adhering to the bone, so that it was necessary to separate them with a scalpel from the posterior surface of the tibia, before I could surround the vessels with a ligature; the parts were obviously much altered in consequence of the pre-existence of inflammatory action in the course of the tibia, and the state of the bone itself was far from being satisfactory. It afforded a remarkable contrast to the state of the radius and ulna in Gardener's fore-arm, which I had amputated only a few minutes before; there the bones possessed the sound and healthy tint with which every surgeon is familiar, and the blood oozed freely from their cut surfaces. In Sprunt's case, on the contrary, the tibia was dry, of a deadly whiteness, and not a particle of blood or of marrow oozing from its cut surface. This led me to fear that I had erred in amputating below the knee; the result, however, proved highly satisfactory; the stump healed kindly, although slowly, and the patient left the hospital full of gratitude, expressing his satisfaction at having exchanged his diseased leg for a wooden one.

This man's leg and ancle were exhibited to you immediately after the operation, and I have now again the pleasure of showing you the bones in an advanced, although not in a complete state of preparation; the bones of the tarsus, and particularly the astragalus, although somewhat softened, and in some points deprived of their cartilages, are, upon the whole, much less diseased than I expected to find them. The tibia appears to have been the seat of long standing and inveterate disease; this bone is enlarged throughout its whole length, but more particularly at its extremities; and on laying it open by a longitudinal section, you observe its whole medullary cavity occupied by osseous deposition; this internal structure has been, in several places, the seat of caries, or perhaps I should rather say of internal abscesses; a small one is observable just at the point where the bone was cut across in removing the limb, another immediately below this point, a third towards the middle of the bone, and a fourth very large cavity is situated in the distal extremity of the tibia, immediately above its junction with the astragalus; this cavity, in the recent state, contained a quantity of purulent matter. It opens in front by a circular aperture immediately over the ancle joint, and it was, I suspect, into this opening that the probe passed when I conceived it to

be going into the cavity of the joint; on the posterior surface of the bone, nearly opposite to the seat of this abscess, you will find some adventitious deposition of ossific matter in a stalactitic form. The fibula scarcely presents any thing worthy of notice; its lower extremity is divested of its articular cartilage, and apparently roughened, but whether this is the effect of disease or of maceration, is not very easily determined.

During the present course, several instances of the *morbus coxarius*, or disease of the hip joint, have fallen under your observation in various stages of its progress.

In the case of *Mary Robertson*, aged 12, a patient of mine, you had an opportunity of seeing this affection in an incipient state, of which the following circumstances were symptomatic:—" Complains of pain inside the left thigh and knee, much increased by exercise; the limb is slightly elongated, apparently from inclination of the pelvis to the same side; the buttock is flatter than the opposite one; the thigh is a little inclined forwards, and the fold between it and the buttock is very indistinctly marked. All the motions of the limb are much impaired, but chiefly extension and flexion, more particularly the latter; pulse 120; some sweating; tongue furred; skin at present cool; appetite good. Complaints are of three weeks duration, and began without evident cause."

This little girl was greatly relieved by leeching, anodyne fomentation, and confinement to the horizontal posture; and after having been about six weeks under treatment, she left the hospital on the 21st of June, apparently free from disease.

In the case of *Elizabeth Orrock*, aged 17, a patient on Dr. Hunter's side of the house, the disease was farther advanced and better marked. This girl stated, " That about eight months ago she began to feel some pain and stiffness in right hip joint, which has been gradually increasing till within a month, since which time it has been increasing more rapidly. Pressure over the trochanter or the motion of joint causes great pain. There appears to be a slight curvature of the spine in the lower dorsal vertebræ towards the left side. The anterior superior spinous process of ilium appears somewhat higher on left side than on right. The right leg appears elongated for about one and a half inch; the toes are everted; there does not appear any swelling or redness about joint; the limb lies easiest in the extended position; has at times throbbing pain in joint; no shivering; catamenia natural; general health good in every other respect."

This case was treated, in the first instance, by the application of leeches, several moxas being subsequently applied contiguous to the joint; and, on the 13th instant, a blister was placed upon the groin and interior part of the thigh, by which means she has been partially relieved.

With reference to these two last mentioned cases, I offered you some extended observations on the hip-disease, which, from its frequent occurrence and dangerous nature, becomes one of much importance. I showed you that the elongation of the limb which is so marked a feature in the early stages of this affection, although it may be in some slight degree influenced by changes in the joint itself, by swelling of the cartilages, or effusion within the capsule, is in all cases, when it becomes so conspicuous as in Orrock's case, to be explained only by the oblique position which the pelvis assumes. From the tenderness of the affected joint, the patient is induced to throw the weight of his body upon the top of the sound thigh, while the affected limb is generally stretched out, and thrown forwards as a stay to prevent him from falling, and to assist him in progression. The pelvis is thus gradually and almost imperceptibly elevated on the sound side, while it drops proportionally on the diseased one, and this obliquity often continues to increase until the patient becomes bedridden, when we frequently find the limb shortened, and the position of the pelvis reversed. This appears to me to be in a great measure owing to a continued state of contraction in the psoas magnus muscle of the affected side, which, originating by different slips from the sides and transverse processes of the lumbar vertebræ, passes down to be inserted into the trochanter minor; its contraction, therefore, tends to approximate the transverse processes on the diseased side, and to give a lateral curvature to the lumbar portion of the spine. This is perhaps aided by the patient's lying for the most part on the sound side, resting upon the crest of the ilium, and thus pushing the pelvis towards the opposite side.

In more advanced stages of the disease, we have a shortening of the limb from circumstances less equivocal, and of which the explanation is abundantly obvious; such are—the destruction of the ligaments, the absorption of the head of the bone, and consequent luxation of the joint—the absorption, in some instances, of the brim of the acetabulum, and in others of the bottom of this receptacle, with the consequent intrusion of the head of the bone into the cavity of the pelvis—of all which I showed you examples.

Amongst other preparations illustrating the ravages of this disease, I showed you an interesting, and perhaps an unique specimen from Dr. Knox's collection, which gives at once a view of all the consequences above enumerated.

Here you saw, on the right side, the acetabulum obliterated, and in its site a rough irregular surface, with scarcely any vestige of an articular cavity; the head of the thigh bone, on this side, divested of its usual glo-

bular form, its surface rough, and the limits between it and the cervix femoris very indistinctly marked. On the left side, the os innominatum is smaller than its opposite fellow; in the site of the acetabulum there is a complete breach or perforation in the bone, with some preternatural ossific deposit above it near the anterior and inferior spinous process of the ilium. The head and neck of the femur, on this side, have been completely absorbed as far down as the trochanter major; this process remains, and the intermediate portion of bone between it and the lesser trochanter is rough and quite irregular in its surface; below this point the femur is smooth and shrunk in every dimension; and this wasting or atrophy extends to the other bones of the limb, the tibia and fibula being both shorter as well as smaller than their fellows of the opposite side. Of this singular preparation, I expect we will be furnished with a much more minute and perfect description in a work on the pathology of the bones, by Mr. Benjamin Bell, now in the press. The history of the subject from whom it was taken, a lad apparently about eighteen or twenty years of age, is unfortunately unknown. Dr. Knox has, however, very kindly offered me permission to take a sketch of this preparation, and I give it to you as a valuable and impressive memorandum of the nature and occasional consequences of this destructive disease.

In the treatment of the morbus coxarius, our object is to subdue the inflammatory action within the joint, and this we attempt in the early and acute state of the disease by the repeated application of leeches; and subsequently by the use of what are termed counter-irritants, blisters, moxas, caustic issues, and setons. This last class of remedies may perhaps be employed here with less equivocal effects, and with a better prospect of success, than in other joints more superficially covered, where it appears to me doubtful how far we can establish an inflammatory action on the surface without the risk of its extending to the interior. Whatever affords a rational prospect of relief, ought to be employed with particular assiduity and perseverance in diseases of the hip-joint, because the removal of the limb, to which we often resort with success in the diseases of other joints, is here scarcely admissible, or at least its practice in this disease has not been encouraging. The excision of the head of the bone in some aggravated cases, where the articular apparatus has been destroyed, and the joint dislocated, is, in my opinion, a much more promising operation; and I mentioned to you a very interesting case, in which it was performed successfully by Schmalz, and which you will find detailed by Hedenus of Dresden in an excellent thesis, "*De femore in cavitate cotyloidea amputando.*"

Amongst the cases requiring operation for the removal of diseased parts or of morbid growths, I would first remind you of that of *Martin Smith*, aged 42, who was admitted on the 6th of May with cancer of the eye, and of which you will find the following report entered in the journal: " The left side of the nose, the inner halves of both palpebræ, and the soft parts for the depth of half an inch on the inside of the left eyeball, are affected with an ulcer of a carcinomatous character. The periosteum of the ossa nasi and os planum apparently partakes in the disease, but the bone is not felt distinctly bare at any point; vision is perfect; general health good; ulcer commenced two years ago by a small pimple, and has constantly been getting worse; complains of no lancinating pain."

This ulcer, Gentlemen, presented, if we except the absence of lancinating pain, all the features of a genuine cancer of the eye, beginning, as that disease usually does, not in the globe of the eye, but in the soft parts surrounding it. In this instance it had involved both the eyelids to a great extent, and had begun to encroach on the sclerotic coat towards the inner or nasal side of the eyeball. Under these circumstances, it became expedient to remove the whole contents of the orbit along with the diseased palpebræ, which I did a few days after his admission; the diseased periosteum covering the bones on the nasal side of the orbit was scraped off with a scalpel, and the cavity filled with charpée.

Healthy granulations very soon appeared over the whole of the cut surface; these advanced progressively so as to fill up a considerable portion of the cavity, while cicatrization gradually and steadily advanced from the circumference towards the centre of the sore; and before the man's dismissal, on the 19th of June, it was reduced to the size of a sixpence. I desired this patient to write me about the end of July, so as to enable me to give you a report of his situation, and I have this morning received a letter from him, at Aberdeen, in which he says, " I am happy to inform you that my eye is very well, the eyelid is shut, and the sore is entirely healed."

On the 2d instant, *John Adam*, aged 47, was admitted with a tumor presenting the following characters:

" Upon the right cheek, about an inch in front of the ear, and nearly on a level with the nose, there is a very hard tumour of about the size of an egg, the base of which inferiorly adheres, but not very firmly, to the mucous membrane of the mouth; superiorly it is very closely connected with the malar bone and zygomatic arch, above which it ascends a little and lies upon the internal angular process of the frontal bone. The skin covering the most prominent part of the swelling is ulcerated, the surface of

the ulcer is very smooth, the edges being irregular, and the discharge thin and watery; the integuments around the sore are of a purple colour and strongly adherent; general health good; pulse natural; tongue a little furred; bowels regular; appetite good; states that he has not been addicted to the use of spirits; disease is of six months standing, and commenced by a small pimple which was never completely healed; swelling has encreased very rapidly since the 1st of May, and is affected at times with slight stounding pain."

July 5th. "Yesterday the tumour was removed by two elliptical incisions; the masseter was bared and the os malæ scraped, two vessels were secured by ligature; the tumour, when cut in two, presented the characters of carcinoma; about an hour after the operation, copious hæmorrhage took place apparently from the transverse artery of the face; the vessel was tied; passed a good night after taking gtt. xl. of liq. opii sedat. pulse 72.; tongue slightly furred; bowels not relieved to-day; slight thirst; skin cool."

In a few days after the removal of this tumour, when the surface left by its excision had assumed a clean, healthy, and granulating appearance, I pointed out to you the orifice of the parotid duct which had necessarily been divided in the operation; this was immediately rendered conspicuous by the flow of saliva on making the patient chew a crust of bread; and it is chiefly with a view to the simple operation which becomes necessary to conduct the secretion of the parotid gland into the mouth when its duct is wounded, that I am at present induced to notice this case. On Saturday last you saw me thrust a small trocar obliquely through the patient's cheek, and after withdrawing the stilette, a small cat-gut bougie previously well oiled, was introduced through the canula, to be left in the trajet of the instrument, for the purpose of rendering the canal fistulous.

I am not sure whether it would not have been better to have postponed this perforation in the cheek until the cicatrization of the sore, which is going on rapidly, was further advanced, but I was desirous before parting with you, to take this opportunity of showing you the mode of treating salivary fistulæ, which frequently prove an obstacle to the cure of wounds in this situation. It was a proposal, I believe of Desault's, in cases where these fistulæ prove troublesome, to compress the parotid gland on the affected side, so as to destroy its secreting power; this, however, is a practice of which I have no experience, and there are, I should suppose, few patients who could bear the necessary pressure.

On the 18th of June, *Margaret Horn*, aged 45, was admitted with a polypus uteri, described in the journal as follows:

" In the inside of the vagina there is a large conical tumour of a soft consistence, very moveable, the apex may be seen from the os externum ; and is of a reddish grey colour, perfectly smooth and free from ulceration, the fingers can with difficulty be passed beyond the base, which is for the greater part quite free and unattached ; it is evident that it is by the centre of its base, that the swelling is connected with the surrounding parts, but neither the connecting substance, nor the os tincae can be felt : general health good, but she complains much of debility ; complexion is very sallow ; pulse 74 ; tongue a little furred ; appetite bad ; bowels costive ; disease is nearly of three years' duration, commenced without evident cause, and is attended with an almost habitual discharge of blood, and constant pain in the loins and sides, the tumour has at times appeared externally after severe exertion, the last time this happened was about twelve months ago. She has been the mother of ten children, the last time of her pregnancy, three years ago, she miscarried."

The disease just described, belonged to a class of cases with which, as a military surgeon, I have had no opportunity of becoming familiar ; I was therefore of opinion that I should do my patient most justice by seeking, at once, the assistance of my experienced colleague, Dr. Hamilton, the professor of midwifery, who readily gave me his opinion as to the nature of the tumour, and very kindly offered me his assistance in surrounding its neck with a ligature ; this, out of delicacy to the poor woman, was necessarily done in private, and was accomplished on the 21st of June, by carrying a silver wire up over the body of the tumour, and then bringing the ends of the wire through a double canula, this was now pushed home close to the pedicle of the polypus, and the ends of the wire secured to the rings of the canula.

This operation was followed by some slight febrile symptoms ; nausea, inappetency, pain in the lumbar region, and retention of urine, probably from the swelling of the tumour. The ligature was tightened daily for six successive days, and a quantity of weak solution of chloride of soda thrown up the vagina, from which there was a fetid and offensive discharge.

On the 27th, the tumour came away in a shrivelled and semigangrenous state, and on the 7th of July the patient was dismissed cured.

This polypus was exhibited to you at a subsequent Lecture ; it was found, in its collapsed state, to weigh eighteen ounces, and had obviously been attached by a very small pedicle from the limited portion of wire required to surround it.

I endeavoured to explain to you the nature and usual attachments of such tumours, and I dwelt particularly on the circumstances by which they

are to be distinguished from prolapsus and inversion of the uterus, with which they might possibly be confounded to the great danger of the patient.

The ligature has very generally been admitted to be the most eligible means of removing these polypi of the womb, and I explained to you the contrivances recommended in the works of Levret, of Desault, of Herbiniaux, of Mayer, and of Grainger, for passing ligatures around them. I pointed out the great advantages of having two canulæ of the same dimensions, so contrived as to be separated or united at pleasure by means of additional short canulæ slipping over them. By this instrument, a ligature may be certainly carried round the base of those tumors in cases when, otherwise, it is difficult to accomplish. This contrivance and its application, are well described in Burns's Midwifery, and in Cooper's First Lines of the Practice of Surgery; but as it is sometimes difficult, even from the best descriptions, to understand exactly the application of an instrument of this kind, I will be most happy to show it again to any gentleman who may not be perfectly master of it.

On the 31st of May, *Charles Gibson*, aged 23, was admitted with the following symptoms of stone:—

"Has considerable pain in making water, which he has frequent calls to do, sometimes twenty times during a night; has frequently passed blood, especially after any violent exertion. The pain is chiefly at the point of the penis, and deep in the perinæum, and is most severe on the stoppage of water while making it, or when made. Has had these symptoms for about four years, and seventeen years ago was similarly affected."

On sounding him a calculus was readily discovered, and after his bowels had been opened by medicine, "the operation was performed on the 1st of June by Mr. Liston; the stone was of a small size, seemingly uric acid." On the morning after the operation, he is reported to have "passed a good night; urine flows freely through the tube; no stool since the operation; skin moist; tongue rather loaded; pulse 80, natural; some thirst." On the 4th, the tube was withdrawn from the wound, the patient having for the two preceding days passed a little of his water by the urethra. The cure went on favourably. On the 17th, the following report was entered: "Wound nearly whole; urine passing by the urethra;" and on the 20th the patient was dismissed cured.

The particulars of this case, and the steps of the operation, were, of course, fully explained to you at the time by my colleague, Mr. Russell; and I consider it unnecessary to dwell upon them again in this recapitu-

lation. You are well aware, that nothing which I can say will render you expert lithotomists, without a perfect knowledge of the anatomy of the parts, and repeated practice of the operation, first on the dead body, and then on the living. The instruments here employed for making the opening into the bladder were of the simplest description; a straight knife, nearly resembling a common scalpel, and a crooked staff, with a groove in the intermediate space between its lateral and convex faces. After the removal of the stone, an elastic gum tube was introduced into the bladder through the wound in the perinæum, and to the use of this Mr. Liston attributes much of his success in this operation.

On the 18th of May, *James Laing*, aged 29, was admitted under Mr. Liston's care with a popliteal aneurism, of which the history and appearances are detailed in the following report.

" Situated in the left ham is a firm pulsating tumor, the size of an orange. Pressure on the femoral artery commands the pulsation in swelling; the pulsations correspond with those at the wrist, but are much stronger. Pulse 72 in a minute. Swelling commenced four months ago. When he walks any distance he has a good deal of pain in the leg. Seventeen months ago, was operated on for an aneurism in the other ham. Health good. Is by business a plumber, and has at times heavy lifts, but was not sensible of his disease till it had gained some size."

" 19th, The femoral artery was yesterday tied with a single ligature by Mr. Liston, and the pulsation in the tumor was immediately arrested. Foot has continued of the same temperament as before the operation; slept pretty well; no pain in wound; pulse 72, full; no stool; tongue moist; pulsation in tumor has returned this morning."

This pulsation in the tumor again gradually subsided, and on the 27th, the following report was entered:

" Tumor much diminished; no pulsation; wound is healing well; ligature has not separated."

The ligature came away on the 3d of June, when the " wound was entirely healed except at the point where the ligature came out, and the tumor was very much diminished."

It is now reduced to the size of a walnut, firm, and totally destitute of pulsation; but the patient has for sometime back been confined to the hospital in consequence of an inflammatory attack in the site of the original aneurism in the right ham. The small remains of the swelling in that situation seemed at one time disposed to suppurate, and was poulticed; latterly it assumed a more indolent character; a blister was applied with a view of promoting its dispersion, and the patient was this day dismissed cured.

The formation of the aneurism in this man's ham, so soon after the cure of the former one, indicates an aneurismal diathesis in this patient, which augurs badly for his ultimate safety; at the same time, nothing could be more satisfactory than the immediate result of the operation. The diminution of the tumor in the ham was more than usually rapid, and appears to me to afford a good illustration of the advantages of early operation, and of applying to the treatment of aneurism the maxim which Mr. John Bell has so energetically inculcated in reference to other tumours: "Permit no tumor to grow uncontrolled, or to attain a dangerous magnitude." You will not be surprised, Gentlemen, at my pressing this upon your notice, when I state that upon one occasion, within a period of twelve months, I saw three aneurisms run on to suppuration after the artery had been tied up: in two of these cases, after much suffering, the limbs were amputated, and the patients ultimately died; the third, after a tedious and extensive suppuration in the sack, was saved with great difficulty.

On the other hand, it is right to state, that this is not necessarily the issue of aneurisms even of the largest size. Many of you no doubt will recollect a case in illustration of this, which was in the hospital last autumn; it was that of a post-boy from Dalkeith, whose disease had been mistaken for rheumatism, and who had in consequence been treated by blistering and other measures equally inexpedient. At the time of his admission, it was one of the largest aneurisms which I had ever seen in this situation, and its fluid contents appeared to be very near the surface. Despairing of curing the disease by the common operation, and influenced perhaps by the result of the three cases to which I have just alluded, my own inclination was to have amputated the man's limb. Yielding, however, to the better judgment of my colleagues, I tied up the artery, and had the satisfaction of accomplishing a cure so as to enable the patient to resume his occupation as a postillion.

The mention of this case induces me to notice a communication to which it gave rise, from one of the students then attending the hospital. This gentleman wrote to me, stating that in his opinion the disease, which has been considered peculiarly incident to post-boys, might possibly be owing to the use of the leather guard which they use to protect their leg from the pole of the carriage, and which is tightly buckled on below the knee, thus causing some degree of interruption to the circulation of the limb. In reply, I wrote the young man, to say, that before going farther into this speculation, I would recommend him to ascertain whether the aneurisms of post-boys were generally situated in the right

ham, as in the case then under treatment, because it was the right leg alone which could be affected in the way he supposed.

Whether the gentleman has been as negligent as myself, and omitted to make the inquiry, or whether he has found the fact at variance with his hypothesis, I know not; but I have not had the pleasure of hearing again from him on the subject. The circumstance, however, is worthy of attention; and if any of you feel disposed to investigate the matter, I will be happy to learn the result.

Having now, Gentlemen, given you an outline of the more interesting cases which have occurred in the progress of the course, I have only to direct your attention to the annexed return, which has been made from a register kept with great attention by my apprentice Mr. Malcolm, and in which you will see a concise numerical notice of all the cases which have been under my treatment in the hospital for the last three months.

You will perhaps allow me to take this opportunity of pressing upon you the advantages of making occasional abstracts of this kind, with a view to ascertain the general results of surgical treatment. I would particularly address myself to those amongst you who may hereafter be entrusted with the surgical department of large hospitals, and upon whom it is more peculiarly incumbent to give from time to time some such statement as this; something in the shape of a *compte rendu;* something which will give us a true picture of the state of our art, and enable us to estimate its real value to mankind. I should indeed wish to see more frequent communications of this occasional and unpretending kind—less frequent and laboured efforts at authorship—more numerous appeals to the "general issue," and to what my late learned and venerable friend Dr. Jackson was accustomed to term the common sense of common men.

Such details and observations as these may not be of sufficient importance to merit the attention of the profession at large, and hence I have not thought of giving them to the public in the usual way. I have printed them in hopes that they may be useful to you. At the same time I have forwarded copies to the gentlemen who are so well employed in conducting the numerous professional journals, in order that they may have an opportunity of selecting any thing which appears to them useful; and it is very gratifying to find that some of these gentlemen have entered fully into my views.

I should wish above all things to see you communicating the final results of cases which may have been the subjects of surgical operation, in order that we may be encouraged to persist in the practice of those operations which afford permanent relief and general satisfaction; and that we may

not be hurried by a premature or imperfect disclosure of facts to perform operations which necessarily subject the patient to present suffering, subsequent delusion, and ultimate disappointment.

Let me entreat you, Gentlemen, to rest the interests of your profession, and the reward of your personal labours, upon the only sure and lasting foundation,—the abandonment of every thing like reserve, and a full disclosure of the results of your experience. I would fain hope that in this respect my example will be held to be in conformity to my precept;—of one thing I am certain,—that, in giving these cases to you, and to the public, I have uniformly acted under the impression, that the man who considers his professional prospects likely to be influenced by reserve on the one hand, or exaggeration on the other, is not in a condition to write with advantage to the public; and that the man who is so tenderly alive to his own reputation as to render him solicitous of concealing his failures, or of blazoning his success, is by much too sensitive a plant for an Hospital Surgeon.

GENERAL RETURN of Surgical Cases treated by Dr. Ballingall in the Royal Infirmary of Edinburgh, from the 1st of May, to the 28th July, 1828.

DISEASES.	Remained 1st May.	Admitted.	Total under Treatment.	Dismissed.					Died.	Remain.
				Cured.	Relieved.	Convalescent.	Without Relief.	By Desire.		
Abscess	3	18	21	11	1	2	...	...	...	7
——— Mammary	1	1	2	...	...	...	...	...	1	1
Burn and scald	1	4	5	3	...	1	...	...	...	1
Carcinoma, (removed by operation)	...	2	2	1	...	...	...	...	...	1
Caries	1	...	1	1	...	...	...	...	...	...
Cataract (in both eyes)	...	1	1	1	...	...	...	...	...	...
Contusion and sprain	...	2	2	1	...	...	...	...	...	1
Diseased Joints, (one leg amputated)	2	5	7	2	3	...	...	1	...	1
Diseased testicle	1	3	4	3	1	...	...	...	...	...
Diseased prostate	...	1	1	...	...	...	...	...	...	1
Dislocation	1	2	3	3	...	...	...	...	...	...
Erysipelas	...	4	4	4	...	...	...	...	...	...
Fracture, simple	7	7	14	10	1	1	...	...	...	2
Hernia humoralis	1	...	1	1	...	...	...	...	...	...
Injury of the head	1	5	6	6	...	...	...	...	...	...
Iritis, (one case accompanied with delirium tremens)	...	3	3	3	...	...	...	...	...	...
Inflamed Bursa	...	1	1	...	...	...	...	...	...	1
Neuralgia	...	1	1	1	...	...	...	...	...	...
Ophthalmia	1	...	1	...	...	1	...	...	...	...
Opacity of cornea	1	2	3	...	2	...	...	...	...	1
Polypus uteri	...	1	1	1	...	...	...	...	...	...
Prolapsus ani	1	...	1	1	...	...	...	...	...	...
Scrophulous and glandular swellings	1	1	2	1	1	...	...	...	...	...
Stricture of the urethra	1	...	1	1	...	...	...	...	...	...
Ulcer	3	20	23	9	3	1	...	2	1	7
Warts, (venereal)	...	1	1	...	...	...	...	...	...	1
Wound, (one arm amputated)	2	7	9	5	...	...	...	...	2	2
Whitloe	1	...	1	1	...	...	...	...	...	...
Total,	30	92	122	70	12	6	...	3	4	27